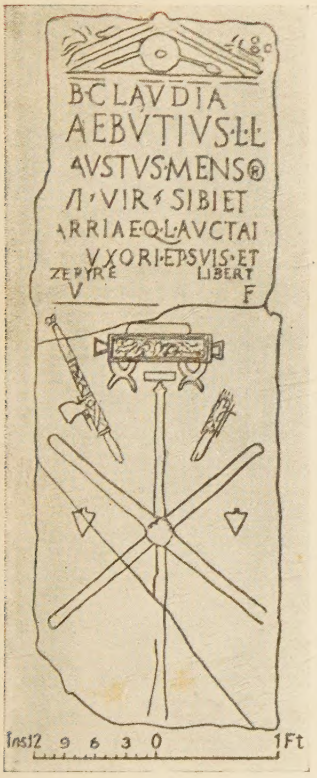
ANCIENT EGYPT

1926. SEPTEMBER. PART III.



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ANCIENT EGYPT.

AN ANCIENT SURVEYING INSTRUMENT.

A SHORT time ago, while looking through a miscellaneous collection of objects at the premises of the Egyptian Exploration Society, I came across a portion of a "groma" or ancient surveying instrument.

The "groma" (from the Greek *gnomon*, through the Etruscan) consisted of two rods fixed at right angles to each other. From the end of each rod a plumb-line was suspended. The instrument was supported by means of a cord loop or by an offset pillar (the *rostrum*) so as not to interfere with the line of sight across the diagonal plumb-lines.

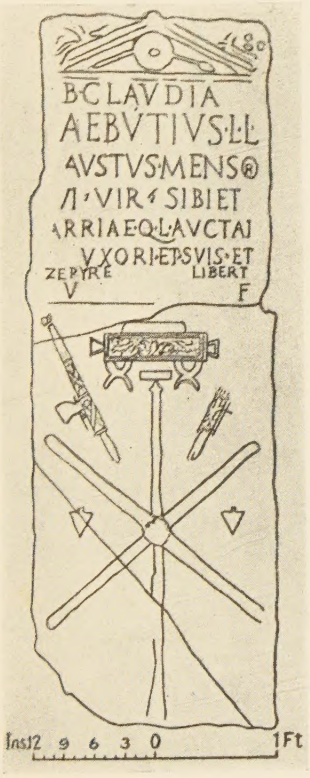


FIG. 1.

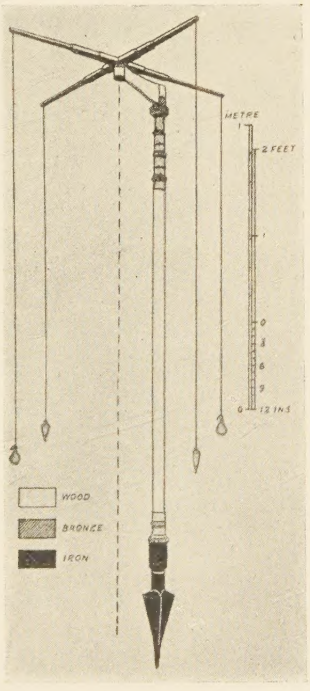


FIG. 2.

The apparatus was regularly used in Roman times for setting out straight lines and for determining directions at right angles to one another in land measurements as well as in building operations. The *rostrum* was firmly fixed in the ground in a convenient place ("The place of the Groma") and had to be railed off to keep interested spectators at a distance. Roman surveyors were called *Gromatici*, and there are several references to these instruments in the literature.

Frontinus[1] describes one consisting of a flat plate pivoted on a stand. Plumb-lines were hung from the corners.

"To use the instrument, we must steady all the plumb-lines and look at the cords or strings stretched by the weights, setting them in line until the eye sees the nearest one only. Then put in the stakes and, having carried the apparatus to the last stake, set it up as before and look at the stakes in the opposite direction by way of a check. Then, to continue the staked-out line when intersected by obstacles, carefully set out the right angles given by the plumb-lines by perpendicular lines at every point of interception."

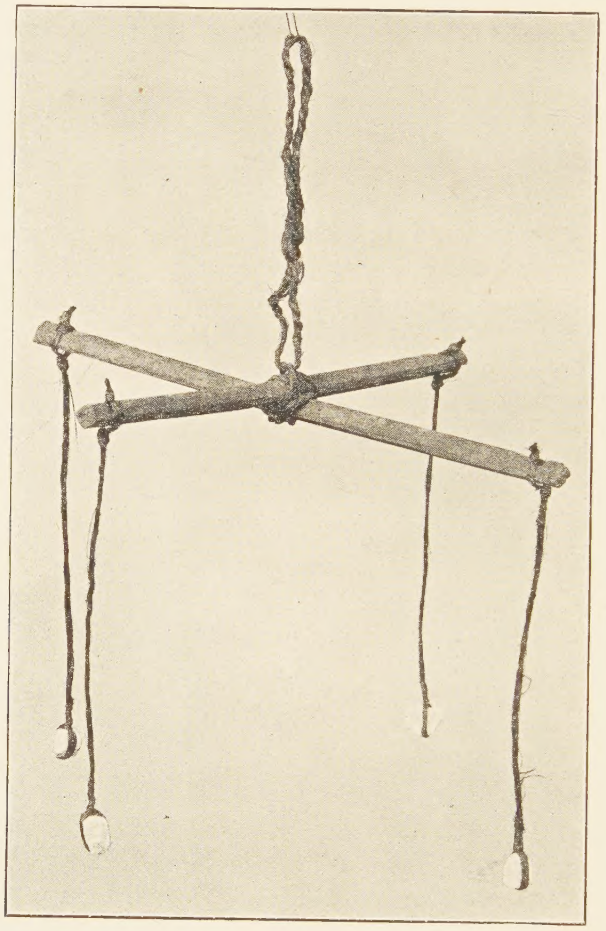


FIG. 3.—1:3 GROMA FROM THE FAYUM.
THE PLUMMETS HAVE BEEN RESTORED.

A representation of a "groma" occurs on a tombstone (*see* Fig. 1) (found near Turin) of a Roman "Mensor," and the remains of an actual specimen were found at Pompeii in 1912. This was reconstructed by Della Corte[2] and is represented in Fig. 2. There is a full-sized model in the South Kensington Museum. An

[1] *Gromatici Veteres*, Lachmann & Rudorff, 1848–52. Frontinus (A.D. 100) was an engineer of the Roman water supply and at one time Governor of Britain before Agricola.

[2] "Monumenti antichi," *Acc. dei Lincei*, XXVIII. In this article M. Della Corte discusses the so-called Bavarian "groma," and comes to the conclusion that it is very doubtful if it really is a groma.

account of these, together with a useful bibliography of the subject, will be found in *Discovery* (Vol. VI, September, 1925, p. 340).

The portion now brought to notice consists of two roughly shaped pieces (each about 12 inches in length, formed of the centre rib of a date-palm leaf) bound together at the centres with a rope of date-palm fibre, forming a convenient loop for suspension. Near the ends of each piece are vertical in-cuts to locate the plummet strings. (Fig. 3.)

So far as is known, this is the first specimen of the kind which has been brought to light. It was unearthed in the neighbourhood of the Fayum in 1899 and until a few weeks ago lay unrecognised amongst a number of miscellaneous objects. It probably dates from the Graeco-Roman period and may be a tomb model.

The specimen has been acquired by the South Kensington Museum Authorities and will shortly be exhibited there. I am indebted to Col. Sir Henry G. Lyons, F.R.S., for the accompanying photograph and to the Council of the Newcomen Society for permission to reproduce Figs. 1 and 2.

R. W. Sloley.

SOME SCARABS FROM THE SOUTH OF RUSSIA.

To the few scarabs and scaraboids found at the northern coast of the Black Sea, and published by the late Prof. B. Touraieff (*Rev. Arch.*, XVIII, pp. 20 ff.), some more should be added, as all these scarabs are of some interest both to Egyptian and classical archaeologists, having most striking analogies with the scarabs found at Naucratis, and published by W. M. Flinders Petrie and E. Gardner (*Naucratis*, I, Pls. XXXVII–XXXVIII ; II, Pl. XVIII).

The group of scarabs that I am going to deal with consists of 17 specimens. Five of them (Figs. 1–5) come from Olbia from the excavations of Prof. B. Pharmakovsky during the year 1911 ; five (Figs. 12–16) from the year 1902, two (Figs. 17–18) from the year 1914, one from the year 1908 (Fig. 19) and four from the collection of the late Prof. Touraieff (Figs. 8–11). They are all made of a very soft paste which turns easily to powder. This paste is light-blue or light-yellow, and is usually coloured all through. The form of the scarabs is very simple ; the elytra are outlined, and a line also divides the elytra from the thorax ; the head, clypeus and eyes, as well as legs, are roughly marked. All the scarabs are pierced longitudinally with a hole.

Five scarabs found at Olbia in 1911 in one tomb (Figs. 1–5) are alike in their form, material and dimensions. They are all about 0·4 inch long, and all are made of light-blue paste. On their bases they bear the following inscriptions and figures :—

1. A lion and a solar disc (*Naucratis*, I, Pl. XXXVII, 34–41 ; II, Pl. XVIII, 8).
2. (*ibid.*, I, Pl. XXXVII, 47–50).
3. (*ibid.*, Pl. XXXVII, 96–97).
4. (*ibid.*, Pl. XXXVII, 84).
5.

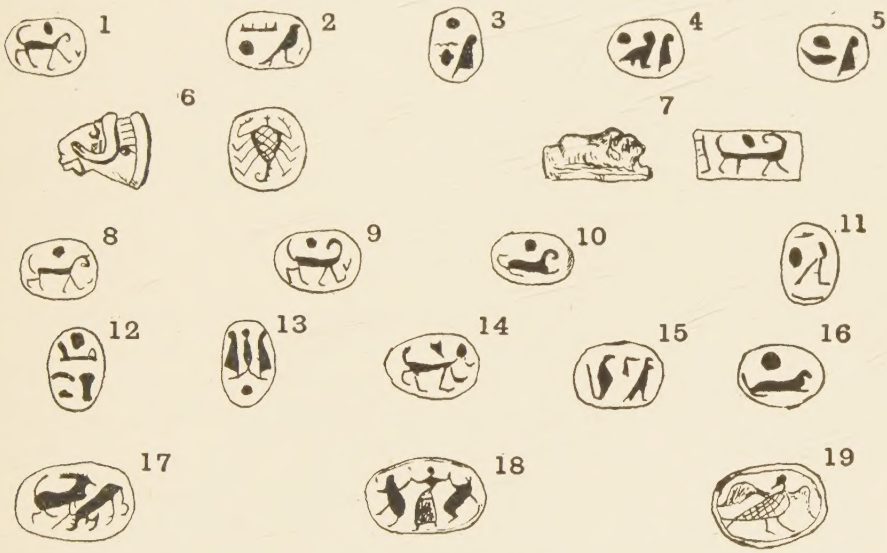
The last of these scarabs has no complete analogy among the Naucratite scarabs, but as it was found in the same tomb as the four others, and is identical with them in form and colour, there can be no doubt that it comes from the same place. In the same tomb with these scarabs three pendants were found ; two are made of glass and represent lions lying on a rectangular base with paws stretched out before them (Fig. 7), and the third pendant is of blue Egyptian porcelain, representing a ram's head (Fig. 6). The pendants in form of lions were found at Naucratis (*Naucratis*, I, Pl. XXXVII, 50, 64, 69, 80, 92, 99, 104) as well as a mould for modelling them (*ibid.*, I, Pl. XXXVIII, 6). On the base of one of the lions is a figure of a lion, intaglio, with his head turned back and a solar disc over him. The other lion is unfortunately mutilated, so that the inscription is unreadable. As to the pendant in form of a ram's head, we find at Naucratis several similar pendants, so much like ours that they seem to be made out of the same mould (*ibid.*, I, Pl. XXXVII, 135, 136, 143, 144; II, Pl. XVIII, 54–56). On the base our pendant has a figure of a scorpion (*ibid.*, I, Pl. XXXVII, 8–10).

Turning to the remaining scarabs, we see that two scarabs from the collection of Prof. Touraieff (Figs. 8–9) bear also the figures of a lion and a solar disc, and consequently are identical with the above-described scarab (Fig. 1). The third scarab from that collection has the same figure of a lion, only lying, and a disc over him (Fig. 10). The last of Prof. Touraieff's scarabs (Fig. 11) has a resemblance to *Naucratis*, II, Pl. XVIII, 20.

The five scarabs from the excavations of Prof. Pharmakovsky of the year 1902 were also found in one tomb. They bear the following inscriptions :—

1. (Fig. 12) (*Naucratis*, I, Pl. XXXVII, 117, 118; II, Pl. XVIII, 70).
2. The crown *3tf* (Fig. 13) (*ibid.*, I, Pl. XXXVII, 120).
3. Winged sphinx (Fig. 14) (*ibid.*, I, Pl. XXXVII, 28–30; II, Pl. XVIII, 60–62).
4. (Fig. 15).
5. A lion with a solar disc (Fig. 16) (*ibid.*, I, Pl. XXXVII, 42–43).

All these scarabs are of a soft light-yellow paste, and bear traces of greenish glaze.



The two scarabs, Figs. 17–18, come from the excavations at Olbia of 1914. They are of soft light-yellow paste, and one has traces of light-blue colour, both of them being flat and long, with hairy legs. On the base one of them has figures of two beasts, the same as we have on several specimens from Naucratis (*Naucratis*, I, Pl. XXXVII, 137–140, 145), and on two scaraboids from Olbia and Berezan, published by Touraieff (*Rev. Arch.*, XVIII, p. 21, Figs. 1–2). On the other scarab is represented a human figure holding two animals in her hands (*ibid.*, II, Pl. XVIII, 58).

The scarab, Fig. 19, has a figure of a bird with outstretched wings, which recalls the Naucratite scarab (*Naucratis*, I, Pl. XXXVII, 79), but as the bird is different it may be of some interest as a new specimen of Naucratite scarabs not found at Naucratis itself.

In the tombs, together with our scarabs (as can be traced from the diaries of Prof. Pharmakovsky), were found black-figured vases, Rhodian, Miletian and Naucratite ware, porcelain and glass beads, which of course fully correspond with the fact of the Naucratite origin of our scarabs.

MILITZA MATTHIEU.

THE RELATIONS OF EGYPT TO ISRAEL AND JUDAH IN THE AGE OF ISAIAH—*continued.*

II.—713 B.C.

AFTER the defeat of the Ethiopians at Raphia, 720 B.C., Egypt played no prominent part in Palestinian affairs in the following years. Philistia, Judah, Edom, Moab are found leagued together in 713 B.C. The centre of disturbance on that occasion appears to have been at Ashdod, where a Greek adventurer had seized the throne. The confederates sent to Pharaoh, king of Egypt, " a prince who could not help them," to invite him to join them. In the records of this year Egypt is apparently regarded as a separate power from Ethiopia. Shabaka had not yet established himself in lower Egypt. Hence we cannot date his rule of that country before the latter part of 713 B.C. at the soonest.

The attempt to secure help from Egypt on this occasion appears to have called forth the oracle we read in Isaiah xxx, 1–5, where the prophet depicts the position of Egypt in terms that were singularly applicable at this juncture.

" 1. Ah the rebellious children, saith the Lord, that make a plan, but not of me, and that cover with a covering, but not of my spirit, that they may add sin to sin: 2. that walk to go down into Egypt, and have not asked at my mouth, to strengthen themselves in the strength of Pharaoh, and to trust in the shadow of Egypt.

" 3. Therefore shall the strength of Pharaoh be your shame, and the trust in the shadow of Egypt your confusion.

" 4. Since his princes were at Zoan and his messengers have reached Hanes, 5. they shall all be ashamed of a people that cannot profit them, that are not an help nor profit, but a shame, and also a reproach."

Such language is certainly not applicable to the year 701 B.C., when the Ethiopians and Egyptians fought at Eltakeh; but it exactly squares with the facts of the earlier year.

" How dangerous this outbreak was considered is shown by the haste with which Sargon acted. Although it was too early for the feudal levy to be called out, he hurried off his turtanu Ashur-isqa-danin with but four hundred and twenty of his own body-guard. The Assyrians suddenly appeared and invested Azekah . . . The Ionian had surrounded low-lying Ashdod with a trench and secured a water-supply from the outside; the capture of Azekah made him lose heart, and he fled to Egypt, whence he was extradited and handed over to Sargon."[1]

That was early in 713 B.C., in the fourteenth year of king Hezekiah. In the present form of the books of Kings, the account of Sennacherib's later expedition has been transposed to the place where there may once have been a narrative of this earlier rising against Assyria and attached to the date of Tartan's expedition (2 Kings xviii, 13). But we shall see later that the best Hebrew evidence as to the date of Hezekiah's accession shows that the date given is that of the earlier campaign.

[1] Olmstead, *History of Assyria*, p. 219.

We now come to an oracle (Isaiah xx) which is often treated as relating to the Tartan's expedition. Nothing could be more contrary to its tenour. If it is carefully read, it becomes apparent that in the Tartan's year Isaiah began his symbolical action, and that it was not till he had "walked naked and barefoot three years" that the prediction was uttered. How the three years were calculated we do not know; they may have been something less than three full calendar years. But when all possible deductions are made, the language used cannot indicate an oracle given before the Tartan's coming. The text is as follows:—

"1. In the year that Tartan came to Ashdod, when Sargon the king of Assyria sent him, and he fought against Ashdod and took it; 2. at that time the Lord spake by Isaiah the son of Amoz, saying, Go, and loose the sackcloth from off thy loins, and put thy shoe from off thy foot.

"And he did so, walking naked and barefoot.

"3. And the Lord said, Like as my servant Isaiah hath walked naked and barefoot three years for a sign and a wonder upon Egypt and upon Ethiopia; 4. so shall the king of Assyria lead away the captives of Egypt, and the exiles of Ethiopia, young and old, naked and barefoot, and with buttocks uncovered, to the shame of Egypt. 5. And they shall be dismayed and ashamed, because of Ethiopia their expectation, and of Egypt their glory. 6. And the inhabitant of this coastland shall say in that day, Behold, such is our expectation, whither we fled for help to be delivered from the king of Assyria; and we, how shall we escape?"[1]

That is a clear prediction of the battle of Eltakeh in which Sennacherib defeated the forces of Ethiopia and Egypt with results that were fatal to the rebellion of the small Syrian states of the coastland. Many oracles of Isaiah as to this have been preserved. It lies outside the scope of this article to discuss them, or indeed the battle and the events leading up to it as a whole.[2]

But there is one point on which Isaiah appears to provide evidence that has a bearing on Egyptian history. While most writers hold that the whole account of the Assyrian invasion in the books of Kings relates to the events of 701 B.C., the suggestion has been made that there was a later Assyrian expedition, of which the monuments make no mention, about 690 B.C. Were the chronology of the books of Kings above all suspicion, it would settle the matter by fixing the dates of Hezekiah's reign, and (approximately) of Isaiah's ministry; but it happens that its data are not self-consistent, and various opinions are held as to the sources of error. It is a fortunate circumstance that we possess a piece of contemporary Hebrew evidence which sets the question at rest.

By dead reckoning from the fall of Jerusalem in 587 B.C. we obtain the year 727 B.C. as the date of Hezekiah's accession according to the books of Kings. The writer who is responsible for that chronology obviously cannot have lived before the last event narrated in the books, *i.e.* before the exile, so that his testimony is not equal to that of a contemporary. But we have a prophecy of Isaiah's

[1] Olmstead writes of 713 B.C., "Judah was by no means a unit in entering the new combination, for Isaiah protested strongly. He loosed the sackcloth from his loins and the sandals from his feet and delivered this oracle" (*op. cit.*, p. 218 f.). How an oracle delivered some years after the Tartan's expedition could be a protest against the events leading up to it is left unexplained.

[2] On these *see* Wiener, *The Prophets of Israel*, Chapter III.

dated in the year that Hezekiah's predecessor, Ahaz, died. This is couched in language which shows that Tiglath-Pileser had recently passed away, and so fixes the year 727 B.C., the year of his death, as the date of Hezekiah's accession. The errors of Kings must be sought in the attaching of the account of Sennacherib's expedition to the date of the Tartan's and in the statements as to Ahaz.

The oracle (Isaiah xiv, 28–32) runs as follows :—

" 28. In the year that King Ahaz died was this burden :—

" 29. Rejoice not, O Philistia, all of thee, because the rod that smote thee [*i.e.* Tiglath-Pileser] is broken ; for out of the serpent's root [*i.e.* Assyria] shall come forth a basilisk [*i.e.* Sargon], and his fruit [*i.e.* his son, Sennacherib] shall be a fiery flying serpent.

" 30. But the firstborn of the poor [*i.e.* the believing Jews] shall feed, and the needy [*i.e.* the same] shall lie down in safety [*i.e.* Jerusalem will not fall].

" but I will kill thy root [*i.e.* Philistines] with famine, and thy remnant [*i.e.* the same] shall be slain.

" 31. Howl, O gate ; cry, O city ; thou art melted away, O Philistia, all of thee [*i.e.* the Philistines will be utterly subdued] ; for there cometh a smoke out of the north [*i.e.* an Assyrian army will come], and none standeth aloof at his appointed times [*i.e.* with a full complement properly equipped and organised].

" 32. What then shall one answer the messengers of the nation [*i.e.* What reply should be given to the Philistine embassy] ?

" That the Lord hath founded Zion, and in her shall the afflicted of his people take refuge [*i.e.* that Zion will remain the inviolate refuge of the Jews in the Assyrian invasions]."[1]

How extraordinarily accurate this is will be seen when the historical facts are recalled. Tiglath-Pileser dealt harshly with Philistia. His immediate successor, Shalmaneser, is not known to have fought against them. Isaiah's oracle foretells not that a fresh enemy *has* come forth out of the serpent's root, but that he *will* do so. This came about with the accession of Sargon, who was not related to his predecessors. He [the basilisk] and Sennacherib [his fruit], however, were father and son, and both inflicted terrible chastisement on the Philistines.

In view of all this, the date of Hezekiah's accession is clearly 727 B.C.[2] He reigned for 29 years. His prophet, Isaiah, had begun his ministry in the year that king Uzziah died (Isaiah vi, 1), and is said to have had his visions in the days of Uzziah, Jotham, Ahaz and Hezekiah. Neither king nor prophet would have been available for the rôles assigned to them in 690 B.C., the date postulated by the theory of a second expedition of Sennacherib.

HAROLD WIENER.

[1] Olmstead, *op. cit.* (p. 297), apparently refers this oracle to the year 701 B.C. He has not noticed that it was delivered in the year that King Ahaz died, an event he puts twenty years earlier, in 721 B.C. (p. 212). The same writer refers the Emmanuel prophecy to Hezekiah (*ibid.* and p. 197 f.), seemingly overlooking the fact that the latter is said to have been 25 years old on his accession (2 Kings xviii, 2). Dr. S. A. Cook (*Cambridge Ancient History*, III, p. 388) attributes this oracle to the death of Shalmaneser in 722 B.C. This view is ruled out by the fact that the Philistines were rejoicing at the breaking of the rod that smote them ; and Shalmaneser did not attack them.

[2] For a detailed discussion of the difficulties of the chronology of Kings which falls outside the scope of this article, *see* Wiener, *op. cit.*, Appendix I.

PROFESSIONS AND TRADES.

Astronomy, etc.	1551–1556	Jewellers	1663–1680
Hunting and fishing	1557–1567	Smiths	1681–1695
Inspectors	1568–1574	Carpenters	1696–1710
Artizans	1575–1584	Bakers	1711–1726
Art	1585–1595	Weaving, etc.	1727–1740
Workmen	1596–1605	Domestic	1741–1745
Sculptors	1606–1617	Nurses	1746–1751
Fitters	1618–1636	Customs	1754–1760
Masons	1637–1643	Deserts	1761–1782
Miners	1644–1662	Foreigners	1783–1804

The recording of time had a special office and service—the keeper of the office of *urshu* (1551–2). It may be that this refers to the "great one," or manager, of the "basin of water," the dripping of which measured the time. The basinful would thus naturally come to mean "the whole day." That there was a time measure is shown by the "office of the day and the hours" (1553).

1551 MK. C. 20716

1552 MK. C. 20628

1553 S.U. II. 192

1554 IV M.M. 818

1555 MK. C. 20314

1556 XII N.Bh. I 45

1557 III L.D. II, 3

1558 III S.M. I, 3

1559 OK M.M. D 19

1560 XII N.Bh. I 49

1561 V M.M. D 19

1562 XII, REC. X, 144

1563 V L.D. II, 60

1564 VI GRT. 17-26

1565

1566 N.Bh. I, 15

1567

1568 MUN. A. 24

1569 P.J. IV, 14

1570 P. Abbot 1, 5, 6.

1571 L. C. 76

1572 T. Pap. 1891

1573 XVIII L.D. III, 40

1574 P.J. N.N.

Another title of learning is the controller of the high dwelling of *seshĕt*, the goddess of writing (1554), probably a school or library. The office of a man seated, holding a branch (1555), suggests a place for botanical knowledge which was so much valued for the introduction of foreign plants, as seen at Deir el Bahri and in the chamber of Syrian plants at Karnak. A vague title is the "keeper of things" (1556).

Hunting was an important occupation, both for food and for suppressing the wild animals of the desert; the Egyptian was near enough to the savage state to have retained a keen pleasure in destroying life. The nobles kept huntsmen, who led the dogs (1557), under a controller; there was also a control of the huntsmen guides, *seshmu* (1558), or trackers. The hunters were registered, as there was an intendant of the registry of hunters, *nu* (1559). The name is written fully in the intendant of hunters (1560).

Fowling was most readily successful on the ponds and backwaters, and the sight of a pool with the birds swimming in a row recalls many such actual groups (1561). They provided the *sekhemkh ab*, or diversion of heart, which delighted the Egyptian (1562). How much was thought of shooting is seen in the many figures of the gods holding the king's hand on his bow, "which teacheth my hands to war and my fingers to fight"; the boy who aimed well was called a "golden shooter" (1563), as we speak of "a golden opportunity." Trapping was more commonly practised, and there was a controller of the bird-net, *abth* (1564). All sports were included in the title "intendant of horns, hoofs, feathers, fish scales, and birds in pools for diversion of heart" (1565). The boat for the fowler has a net spread in it, probably for a trap (1566). The organisation of fishing is often figured by large groups of men hauling in a seine, as directed by a "lieutenant of the gang of fishers of fish for the residence" (1567).

Two different vase signs have often been confused, the upright vase with slight handles belonging to a food provider (N.Bh. I, xvii–xix), and the globular vase with wide handles signifying an inspector, *uu* (1572). An inspector of the office of records, *deqeru* (1568), is named, as also of the "writings of the houses of life," or census returns (1569). The inspectors were royal or local (1570–2); they also acted over the priesthood (1573) in the temple of Amen. The simplest form of the title is 1574.

Two different words are confused together with variants of one sign, the vase drill, weighted with stones at the top, and with a flint held by a fork at the bottom, to cut the hole. The words *ubă* and *hemt* both mean "to bore." If there be a difference in the sign, it would need to be proved by early examples, with the spelling, examined on the original monuments; the printed forms and usage are a mere confusion. The *ubă* was a lower worker, passing into common servants; the *hemuti* became an artist (the man who *sat* to his work), and *hemt* rose to meaning fine art and magic.

The *ubă* or *ubu* (1575–6) were ganged in groups of 10 for mining work (1577); there were intendants over these groups (1577–9), also an "intendant of the intendants of the houses of all workmen of the king" (1581), and a "great workman of the king" (1582). Very early there is a "controller of the registered workmen knowing excellently the heart of his lord" (1584). Hence we pass into the art of the *hemtu*, as the intendant of art of the workmen contrasts the two (1585), and the spelling in "controller of all *hemt* art" is conclusive (1586). There was also the scribe of the intendant of all art (1587), one great in the midst of art (1588), great of high art (1589), and great in art (1590). The training, which must have been long and careful, was "following art," as in the palace intendant of following art (1591), and "in the following of art" (1592); similarly there were pupils of the engravers, *am khet qersti* (1617). The temple building required an intendant of all art of Amen (1593). Another title, which must be kept apart, is the scribe of the temple, *ubă*, in the residence (1594), a palatine chapel. An expert *ubă* or *hemt* cannot be further defined (1595).

An elder *semsuy* is named in Sinai (only one to 60 miners), and an intendant of elders (1596–7), so these were probably foremen. A keeper of the office of *ubau* workmen appears (1598), as well as an intendant of 10 workmen, who were sometimes local Oamu or Bedawy (1599–1600). The gang, *să* (1601–2), was also of 10 men, as shewn by the names on the great stele of 100 names (Sinai). Another kind of workmen were the *beq* who were registered, see *bek* as workman or servant. An overseer of the sledges for drawing stones is in 1604 (and P.S.C. XII U), and an intendant of servants in 1605.

In building, the usual signs of a man piling a brick wall, or placing a plummet to a stone (538–9), have been noted as referring to brick- and to stone-work, together with many examples of public works (511–46). One of the most usual signs beside the above is *qers* written with a harpoon (1606). The harpoon was in early prehistoric times the principal object made of bone, and came thus to be the sign for bone and ivory. By the Ist dynasty it was made of metal, in a form which originated the hieroglyph (T.W. xliv, 33–5). In the hieroglyph the top strokes are the notch for tying it by the cord, the two lower sloping strokes are the barbs. This harpoon is the earliest strong pointed tool, and naturally it was used to cut in to wood or limestone for lines or patterns. Hence it had the meaning of engraving or sculpture, and also appears in the "cutting by

1575	B.A.	N.N.	1596	SIN.106	N.N.
1576	SIN.106	N.N.	1597	VI SIN.16	
1577	VI SIN. 16 MM, H1		1598	XII P C-7	
1578	IV MM·B10		1599	SIN. 16	
1579	MK. C. 20631		1600	SIN.112	
1580	AS. VI. 75		1601	SIN.112	
1581	XIX L.D.III,132		1602	SIN.121	N.N.
1582	BM		1603	XII C	
1583	XIX B.T.V.950		1604	P.S. III	
1584	III S·M·I1		1605	VI S·M·I, 29	
1585	Ra B·A·226	N.N.	1606	XII SIN.85	
1586	IV M.M.C1		1607	XVIII P.N. LXXVIII	
1587	XVIII F 1802		1608	XX Z·A·S· XI,11	P.HARRIS 8
1588	MAF I,498		1609	(CHABAS)	
1589	A·S·VIII,65		1610	MK C·20300	
1590	P.A·47		1611	XII C·20520	
1591	VI L.D.II,115c		1612	B.A	
1592	VI LD·II,115b-c		1613	V L.D·II,160	
1593	XVIII N.R.		1614	XII P.S. 170	
1594	PTOL A·S·XVII,92	N.N.	1615	MK C·20592	
1595	VI MEIR IV XIV		1616	MK C·20730	

evil," as we say "a cutting misfortune." That it was used to denote an engraver of hieroglyphs is shown by one *qersti* (1606) being named on the great stele of 100 names; an engraver would be of no use in Sinai except for inscriptions. Again, the title appears for the maker of a beautifully engraved stele (1607); again, it has been identified as used for the engravers of stone with the block determinative (1608). It is claimed also as denoting the carvers of funeral coffers (1609). There was an office of sculptors with an intendant (1611), and a palace intendant (1612). A scribe of engraving (1614) was for writing out the text ready for the sculptor. By a play on words, the sign *qes* of Cusae was used as a word sign for an engraver (1615), also for one employed by the vezier (1616). There were naturally a large number of pupils to supply the immense works, recorded as "in the following of engravers" (1617).

Another title very usual in building is *qed*. Following the common form, it was wrongly described as a graver (in No. 540), but Prof. Griffith had published a fine early example shewing it to be a plasterer's float of wood with a loop

handle (*Hieroglyphs*, No. 186). For such an actual tool see *Kahun*, IX, p. 10. The idea of finishing up a building by going round it plastering has provided most of the many meanings of the word—to form or shape a thing, the figure or appearance, the going round or circulating, the qualities or accomplishments of a person, and the "whole altogether" was literally "like plastering," *ma qed*. It is used, with an evil sign, for perfidy, as we speak of an "accomplished" rascal. It has often been supposed to mean building, but that is provided already with the figures 538, 539. Where detail is shewn, in the brick scene of Rekhmara, there is no *qed* where an unfinished wall is being set up, but only where a man is fitting on the slabs of paving on the ascent (N.R. xx). The *qedet* workmen were not a high class, being only *remtu* (1618). The "scribe *qednu*" is finishing off statues and vases by inscribing them (R.C. lxii).

These fitters had a mayor of the trade, who was otherwise called warden (1619–20), scribes of the men or works are named (1621–2), also an intendant of the messengers of the scribes, and a ganger of the scribes (1623–4). An administrator and intendant of the workmen controlled the work (1625–6). Passing now to the work itself, a scribe of finishing seems to have done actual engraving, as his name appears on the edge of a great family stele, apparently as the executant (1627). Other scribes of the forming or fitting, and an expert, are named (1628–30). Lastly, there is a royal carpenter who completes the building in the palace (1633). Thus there does not seem to be ground for confusing the sign *qed* with the building of the brickwork; the sense of plastering, carpentering, paving, and general fitting-up of the bare shell of brick walls, appears to agree with all the instances.

The more definite technical work is named, mainly in the Leiden papyrus of titles (B.A. 226). The final adjustment and perfecting of a building was by the "sealing husband, engraving" or finishing (1634), the husband being like our "ship's husband," and his duty to complete the fine detail. Two titles (1635–6) are together in Sinai, the creator or former, *formatore*, sculptor, and the quarrier, *usho*, from *usha* to break. There are some variants of the *ăăkă*, masons (1637–9). The men of monuments probably mean the trained labourers who knew how to move and adjust the stones (1640). The *khemou* are translated as chisellers (1641). The scribes *sepekheru* are the draughtsmen or architects, who drew the surrounding lines or outlines of all the buildings (1642–3).

The *kherti* (1644) are usually rendered masons, but there does not seem any instance where the term may not mean miners, as it implies by the meaning of "those underneath." The quarries of Turra, south of Cairo, had an intendant in the VIth dynasty (1645), and there must have been a very large staff there in the great days of pyramid building. The warden of the quarrymen (*shot*, "to cut") at Hammamat (1646) was the leader of the nome. The quarrymen were grouped in gangs, *să*, of *neter kherti*, originally a tomb cutter in the divine region of the cemetery, and then merely any miner in rock (1647). The *să* was also written with the amulet sign (1648–9). The management of the quarters of the men was in charge of an overseer of the house of miners (1650). There was an official over the *qotu* of His Majesty (1651); whether this word is a variant of the *kătu* (in brackets here), or some derivation of *qăt*, high, needs more examples to show it. Certainly the usual sign for a miner in Sinai (1652–3), with the arms raised, points to *kătu*, a man of works. The list of chief miners is headed *kher-neter reni em hăt*, "miners' names in heading" (1654). The miners at the gold mines were slaves, men and women, reckoned up for permanent service (1655).

The higher staff comprised *mes oăti*, "devisers of precious stone," or prospectors who searched for sites (1656); *sheny* (1657) who called up the workmen (one in sixty of all); *ozău* who cut the rock to examine the vein; and *uhă* "to break" (or "to collect") the rock for extracting the turquoise, not common miners, but only one in a hundred. The herd of *kherti* were employed in cutting away all the dead ground to reach the veins in which the turquoise was to be sought. There was provision for the clothing (which wears away quickly amid

1617	B.G. 10		1649	SIN. 121	N.N.
1618	P.A.6.		1650	SIN. 85, 92	
1619	A.S. VIII, 256		1651	B.M. 709	
1620	A.S. VIII 256		1652	SIN. 90	
1621	VI MEIR IV IVA		1653	SIN. 24	
1622	B.M.		1654	SIN. 85 List head	
1623	MK C. 20309		1655	DE ROUGÉ	
1624	" "		1656	SIN. 105-6	
1625	T. 1522		1657	SIN. 106	N.N.
1626	M.K. C. 20081		1658	SIN. 105	
1627	XIX P. SED LXVIII		1659	SIN. 85, 106	N.N.
1628	VI MEIR, IV, VIII		1660	SIN. 35	
1629	XIX BM, L. 1354		1661	MK. C. 20520	
1630	XIX T. SHAB. 2641		1662	XII SIN. 105	
1631	" 2645		1663	II RT. II, XXII, 190	
1632	VI L.D. II, 115g		1664	MK. C. 20168	
1633	VI B.A. 419 N.N		1665	MK. C. 20594	
1634	B.A. 226 N.N.		1666	C. L. 730	
1635	SIN. 85		1667	M.K. C. 20271	
1636	SIN. 85		1668	B.A. N.N.	
1637	B.A. 226 N.N.		1669	XIX BBE 26	
1638	XX B.A. 230 N.N.		1670	XXVI A.S. XVII, 181	
1639	B.A. 294 N.N.		1671	L. V. 107	
1640	SIN. 106 N.N.		1672	MK. C. 20515	
1641	B.A. 226 N.N.		1673	XXVI A.S. XVI. 146	
1642	M.K. C. 20075		1674	IV MM, C I	
1643	M.K. C. 20520		1675	XIX A.S. XI, 96, 158,	
1644	RO. B.A. 226 N.N.		1676	XVIII L.R. 53	
1645	VI L. 34		1677	A.S. XIII, 170	
1646	XX B.A. 228 = 545		1678	RO B.A. 226 N.N.	
1647	M.K. SIN. 112 C. 20397		1679	EBERS P. 106	
1648	SIN. 85		1680	B.A. 220 N.N.	

the rough sandstone rocks), a man in charge of the wardrobe, *heby* (1660). The expeditions were guarded by soldiers (1661), and an intendant of archers (1662).

The earliest mention of gold work is in the IInd dynasty, when a jeweller was "making sound all things of gold of Nubia and gold of Aăm" (1663), which shows that the gold supply then was southern. In the Middle Kingdom is an artist in gold (1664), and an intendant of gold workers (1665). Various forms of the name occur, down to 1672, and there were overseers (1670–1). A goddess

of gold (1673) was worshipped at Edfu. For jewellery in the IVth dynasty there was a controller of the house of amethyst, *thehen* (1674). Artists are often mentioned, who "make alive," *se-onkh* (1675), and one is represented bringing in his gold work from Syria under Tehutmes III. There was a house of artists under an intendant (1676), or under a royal noble (1677). A keeper of the copper vessels is named (1678) parallel to the librarian, called *thay sha*. *Hemem* is a metal worker (1679). A curious name for a jeweller, as shewn by the context, is *neshedti* (*see* E.G. 87); this seems to be from נשׁד, *neshed*, usury (1680); the jeweller was naturally ready to lend money on jewels, and so became the pawnbroker. This word belongs to the New Kingdom, and we see from the prophets how common was the taking of a pledge for debt in that period.

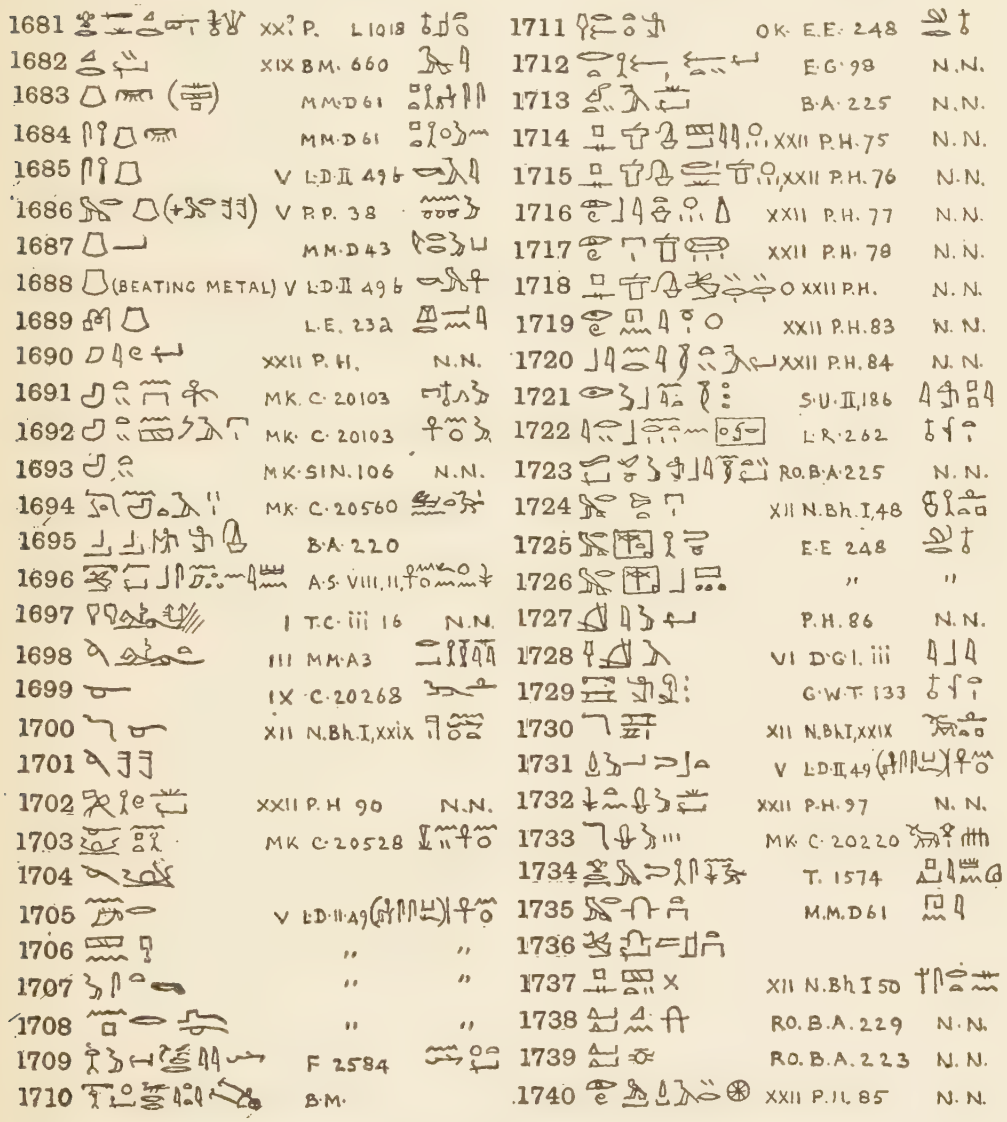
The larger metal work was done by smiths, *qăry* (1682), who were all under control by an "over warden of smiths, manager of south and north" (1681); the reversal of the *met* sign seems due to connecting it with the boundaries. The two branches of work were the beating and casting. The massive stone beater held in the palm of the hand (1688) is the determinative of *seshep*, to smooth; this is from *shep*, to flow or run out, applied to blindness (from effusion of lens?), and so beating metal is "causing it to run out," *se-shep*. Gold-beating was done by this means (1683–4); there were expert beaters (1684–5), and an intendant of beating accompanies an intendant of engraving (1686). When melting metal the crucible was not lifted, for fear of its breaking with the weight, as the material was not strong; it sat on the furnace floor and was tilted over to pour out the metal. As it sat, *hems*, it was called *hemt*, like sitting persons—a steersman, an artist, and a woman. The *hemti*, or smelter, of the Treasury is in 1691, and the smelter of the smelting-house (*ne shemă*) in 1692. The smelters had messengers, under an intendant (1694). The *bobo* (1695) are rendered "smelters" by Brugsch, but the meaning "to be clear" or "pure" (*bobo*) points to a refiner. *Bobo* is a duplication of *bo*, "to shine." For once, the tools are named (1696) by a "chief engraver (*thău*) graving (*besen*) metal for Amen"; the *besent*, graving tool, seems probably a foreign word.

Carpenters are first designated by chisels (set on the side of the handle) and graving points of harpoons (1697). What the lion with an emblem on the back means, here and elsewhere, is not yet known (*see* 1911). The axe appears in the IIIrd dynasty (1698, and onward to 1704). The *hu* axe-man (1702) seems to be a carpenter by its position in the list. There follows the boat-builder of Ptah (1703), and another (1704). The usual name for the worker with the adze was *nezar* (1705), which seems to have lasted on in Egypt as *nejar* for a carpenter. The mortise-cutting with chisel and mallet was *shen*, "to join"; the quotation given for this (Pierret, 587) should read *shen em ek*, "join in thee," as the *m* does not seem to belong to the radical according to 1706. Sewing was *ust*, in 1707. The word *neper* (1708), as stated to mean a border, will have to be modified if it accords with the adzing scene in L.D. II, 49. Lastly, there are the artizans of chariot-building, work that needed the highest care in joinery, owing to the slight construction and the heavy shocks which befell it (1709–10).

The baker was named *retehti*, of which there are variants (1711–12), and *khenti* (1713). The various kinds of bread and cakes are listed in the Hood Papyrus; 1714 *shoy*, probably crumbly bread, from *shou*, sand; 1715 *rehusa*, from רחשׁ, to swell or boil up, as puff paste; 1716 *bat* bread in tall conical loaves of *beti* corn; 1717 *persă*, from פרס, to break, as shortbread; 1718 *thăirir*, from צרר, to bind up, or a bundle, as a turn-over cake. The next two,

1719–20, separated by Brugsch, are more probably all one, as Maspero read them, the maker of jars of date conserve, *benerati*; the same conserve appears in 1721–2–3, for the palace of Amenhetep III (1722), and a sealer for the manager to close the jars in 1723. Lastly, in 1724, an intendant of the house of sweetmeats (1724), who is only dealing with cakes, and not meats. The intendant of the mill for *heth* bread, and for *besh* bread, is named (1725–6), the difference of milling being perhaps as for our brown and white flour.

Weaving is sometimes named, as in the list of trades, the *sekhau* (1727),



and the memorial of a controller of weaving (1728), also an overseer of the weaving-ground workers, men and women (1729). The intendant of weaving, watching the work at Beni Hasan, has only the pegged-out loom on the ground to denote it (1730). In the publication, alter "canals" to "weaving," and Pl. XXX to XXIX.

Leather work is often figured, and the man cutting out sandals is "dividing the sandals" (1731). Then follow a royal sandal maker, and an intendant (1732–3). The leather workers, *thehes*, of the king's son are mentioned by an

overseer (1734), who was son of the overseer of the same factory when belonging to the *neter duat* (queen) *ăkh*, or the "majestic queen."

Matting has always been a great trade in dry and dusty Egypt, and a modern mat is identical in fabric with those of the Ist dynasty. The sign in 1735–6 has been rendered basket or mat, but mat seems much more likely in the latter instance. In 1737 *psesht* means "to divide," hence "in the midst" according to Maspero; the connection with the domestic holding a mat is not obvious. In a Roman list the bearer of the *qena*, carrying-chair (1738), and the bearer of the *nu*, water-bottle (1739), are among servants. The maker of *mozăir* (1740) refers to garlands, by the determinative, and the root *mezer* is to surround or restrain.

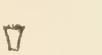
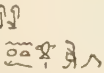
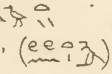
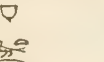
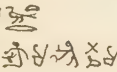
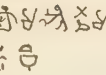
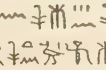
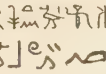
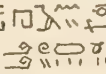
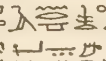
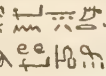
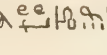
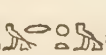
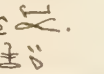
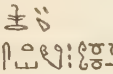
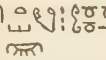
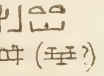
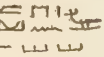
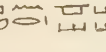
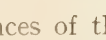
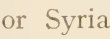
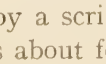
Domestic officials are the keeper of the ointment (1741), the controller of washers (1742), the horn *ab* being used instead of the alphabetic signs, and the determinative being women, as also for brewing; it is notable that these offices were held by one of the most powerful nobles. The washing-book when travelling was kept by a "scribe of the king's washing of his things at following," or in his progresses (1743). Nurses, *menot*, were always held in honour (1746), also a great nurse (1747). Royal nurses of the king's children occur mostly in the XVIIIth dynasty (1749–50), and the same term was applied to the tutors, as that of Prince Uazmes (1751).

There was an official "for transport," *mo sebui* (1752), and a "bearer for the *hăni* vase" (1753), the purpose of which we do not know.

The control of imports and exports was fully regulated in late times, and even in the IInd dynasty there were sealers of northern tribute (806–7). The guard over the coast was by the "intendant of the mouths of canals of the lowlands" (1754). A secretary kept count of the entrance-gate of the south and north (1755). A warden of the dues of the land in its limits (1756) received the customs; the word *shet* here, with the cross determinative of cutting, is kin to *shot*, cut off, *shed*, cut off, and *shed*, customs dues, on the Pithom stele. There were official records of customs kept by the "over-keeper of records of the office of the great green sea" (1757), and deputy intendant sealer of the office of the great green sea (1758). A scribe of the collection (1759) is for the customs, also a scribe of the counting (1760); all this class of officials (1754–60) belong together in the list.

The deserts are often mentioned, both for protection from the desert tribes and as a source of gold and valuable stone. There were intendants of the south deserts (1761), of the *khăst* or desert people of *kens*, Nubia (1762), and of the desert for gold, or gold of Amen (1763–4). Rarely there is the eastern desert named (1765) or the expert of roads at Hammamat (1766). The deserts in general are mentioned (1768, 1771), and the gate of the desert (1769–70), probably at the cataract. One official "brought the affairs of all the deserts for his lord Horus," the king (1772), and a scribe was intendant of the desert offices of the queen (1773). The western deserts are more often named, owing to the oasis roads and tribes; the desert of Memphis (1775), of Thebes (1776), and Mentuhetep the vezier was the pillar of the north and intendant of the western deserts (1774, 1777). A wide authority extended over the lands of Kharu and Kesh—Syria and Nubia (1778). A ruler was over the Egyptian towns of the north (1779), and one "reckoned the deeds (*outi*) of royal land in all northern countries" (1780). In Sinai there was an intendant of the desert over the archers (1781). A home office was secretary of the mouth (ordering) of all deserts (1782); situated as Egypt was, the hill sign was equally used for foreign land or desert.

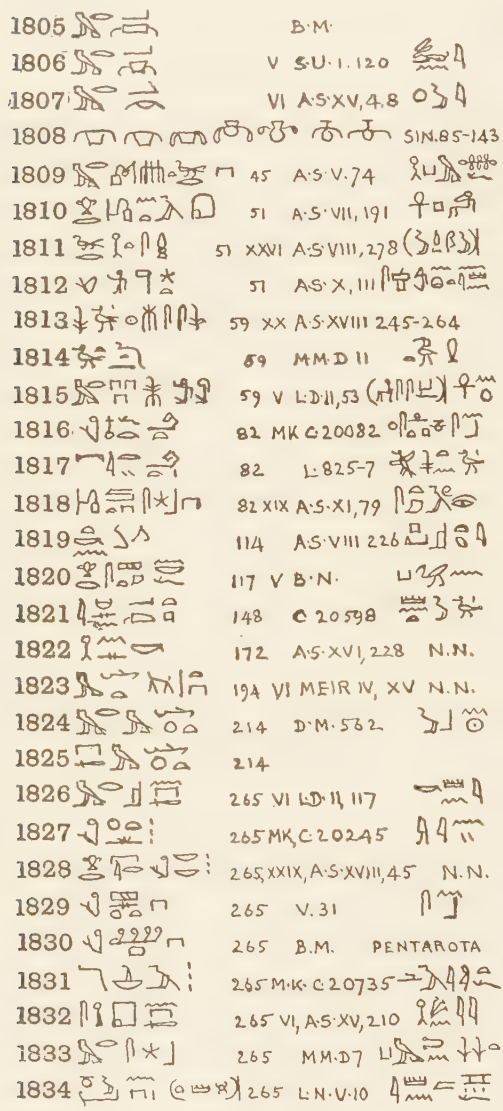
The foreign peoples who are mentioned were on all sides. The Mozăy (1783–8) were Nubians used as police, like Sudani police now. A scribe was over the servants of the king from the land of the bow, Nubia (1789). Other Nubians are in 1790, people of *Shot* (1791), and of Uauat (1792). The Atu are Asiatics (1793). The Temehu (1794) and Moshauashau (1795) are Libyans, and the latter were abbreviated as *Mo* (1796), remaining under their great chiefs, a title often

1741  XII N.Bh.I,45
1742 III S.M.I,i
1743  S.U.II,201
1744 XII N.Bh.I,49 N. N.
1745  " " M.K. C.20588
1746 XII N.Bh.I,47
1747  L.R.116
1748  PTOL. A.S.XVII,90
1749  A.S.II,198
1750 XVIII, L.R.67
1751  L.D.III,11-13
1752  XXII P.H.96 N. N.
1753 XXII P.H.72 N. N.
1754  XXII P.H.46 N. N.
1755 VI A.S.XVI,195
1756  XXII,P.H.47 N. N.
1757  XXII P.H.50 N. N.
1758  XXII P.H.42 N. N.
1759  XXII P.H.45 N. N.
1760 XXII P.H.44 N. N.
1761 XIX A.S.XX,129
1762 A.S.I,185
1763  A.S.XI,68
1764  XX A.S.X,132
1765  XII N.Bh.I,39
1766 VI L.D.II,115l
1767 B.M.
1768  IV,V L.D.II 100b
1769 XXVI P.S.XXI 5
1770  B.N.113
1771 XIX Z.A.S.III,29
1772 V S.U.I,123
1773  XVIII P.S.CONE 21
1774 XII REC.X.144
1775  B.M.
1776 XIX B.M.
1777  C.20539
1778 XXII,P.H.
1779  XII,M.Ab.II,23
1780 S.U.II,120
1781 SIN.294
1782 IV-V L.D.II,100b
1783 A.S.XX,129-31-39
1784 XIX Z.A.S.III.29
1785 T
1786 P.Ab.I,10
1787 T.3069
1788 P.S.CONE
1789 C.M.40
1790 B.M. ATU
1791 A.S.VIII,53
1792 A.S.XX,132
1793 XVIII B.M.681
1794 A.S.I,163
1795 XXIII P.L.1012
1796 XXIII A.S.XVI,62
1797 A.S.VIII,284
1798 SEE 1600 P.23
1799 G.W.T.42
1800 XVIII SIN.184 N.N.
1801 A.S.XVI,177;XVIII,247
1802 B.M.CONE
1803 M.K. C.20053
1804 XII N.Bh.I,12

held by princes of the Bubastite time, without more ethnic meaning than our title Prince of Wales. The Libyans were otherwise marked by their feathers (1797). The Oamu, or Syrians, are often named (1798). An ambassador was "eyes of the king over the lands of the Retennu" (1799); and in Sinai the camp followers were listed by a scribe of the following men and women of Tenu (1800). Two general titles about foreign chiefs (1801–2), are followed by two curious phrases,

"intendant of foreigners (*ooa*) that heaven creates on earth" (1803), and "intendant of all things given from heaven to foreign lands" (1804). The interpreters, *o*, who understood the foreign speech *ăoo* or *ooa*, were under an intendant (1805–6–7); there were usually one or two *ou* in a Sinai expedition, and the form of the sign varies greatly (1808).

There remain over a hundred titles which are more or less uncertain, some quite unintelligible; these, with some which appeared too late to go in the series, are stated in Nos. 1809–1949. Where some likely connection, or general place,



is suggested, the position is given by a reference number following the title. Most of the words here are familiar in the previous titles, but some may be noted. 1829–30, the chamber *shespet*, was probably in the palace, as it had a keeper. 1834, *nu*, is probably *nuu*, a controller. 1835 seems to be the royal biographer. 1838 is a delicate phrase for the royal embalmer, "the intendant of embalmers of the double crown," *urti*. The secret service is in 1840, secretary of the secret notifications, 1841 secret orders, 1842 intendant of all secrets. 1843 is a traveller for some office. 1844 is probably *seuzet*, organiser. 1845 was "great in the

1865 608 OK.P.P.38

1866 613 S.U.11,170

1867 680 B.A.222 N.N.

1868 682.IV,L.D.II,34.

1869 762 MM.D.19

1870 769 BM 754

1871 803 A.S.V.122

1872 803,S.U.I.114,PEPY II

1873 834 MM.D.43

1874 834 MM.D.25

1875 837 XIX L.D.III 132n

1876 957 MM.D.19

1877 965 L.R.104

1878 IC 1023 IV L.D.II.8

1879 1118 A.S.XVI,259

1880 1118

1881 L.63

1882 PS 74 to 354

1883 1118 P.S.117

1884 1178 XII B.M.305

1885 1178 XVIII P.S.41

1886 XVIII P.S.42

1887 1178 V.71

1888 1204 III SM.I,i

1889 1240 MM.D47

1890 1252 MM.D47 "

1891 1276 IX L.D.II.98

1892 1345 D.M.533

1893 1389 XVIII L.R.314

1894 XVIII A.S.XX,7

1895 1421,XVII,L.D.III,11-13

1896 1431 XVIII P.S.30,35

1897 1431 P.S.333

1898 1441 E.S.795

1899 1511 VI L.D.II,115h

1900 1520

1901 1540 B.A.254 N.N.

1902 1540 B.A.252 =1488

1903 1680 C.20630

1904 C.20630

1905 1723 T

1906 1730 R.C.CXXIII

1907 1745 C.20623

1908 1751 C.20323

1909 1751 F.2563

1910 1751 P.S.CONE 23

1697 I.T.C.III 16 N.N.

1698 MM.A3

1911 R.T.II,XVI,116 T.C.III 10

1912 T.C.III,12

1913 M.M.D 38

1914 III B.M.8

1915 IV MM B3

1916 MM.A3

1917 SEE 1878 1911 VI A.S.XV 215

1918 A.S.XV,215;S.U.I,112

1919 MK.C.20186

1920 MK.C.20483

1921 MM.D38

1922 B.M

1923 P.S.83

1924 P.S.83

1925 B.M.301

1926 C. L.547

1927 VI A.S.XII,130

1928 A.S.VII.41

1929 IV M.M.C.15

1930 C.28006

1931 (WOMEN) IV MM.B3

1932 MM.A1

1933 H.B.XXIII

1934 MAF.I,191 L.1356

1935

1936 PTOL. A.S.XX,215-7

1937

1938 B.M. OSIRIS

1939 B.M. SARCOPH.FRAG.

1940 USUAL

1941 B.A.222 N.N.

1942 RO. B.A.227 N.N.

1943 VAT. L.713

1944 V.11

1945 T.1539

1946 MK.C.20075

1947 MK.C.20391

1948 A.S.VII.51

1949 NR Q 334. N.N.

diwan." 1848 was the intendant of the department of servants. In 1849 the intendants were all under control of the great vezier Rekhmara. 1857 suggests that the orderlies had a mess-table, as in No. 400. 1862, the careful sealer of the lofty works, may refer to vouching for the completion of buildings. The scribes of the king's travelling are named, 1863–4. 1867 was a high title, perhaps the registrar of tenancies in the land. 1868 shows the elders of the *hayt* court to be at least as early as Khufu. 1870 is an "active protector." From 1872, the "house of gold" seems to have been arranged for the *sed* festival.

1878 is the title of "protector." 1888 is the controller of agricultural land. 1879 is warden over the lake, the Fayum; and the roads (1880) which he was over would be the desert paths from the Nile to the lake; the family belonged to Deshasheh. 1891 seems to be the scribe of cut-grass fodder, "earth hair." 1901, the sailors of the nomes of the north land were looked on as the most able.

The gold-beaters are named in 1903–4. 1906 is the intendant of the weaving ground. 1907 seems to be a variant of the *shă*, mother-in-law, "of his father." (A.S. 1923? 613.) 1908 is a "familiar nurse," 1910 a tutor, "father nurse."

Passing to those for which no connection is known, the early lion seals 1697–8, 1911–12 are a peculiar class, sometimes with a borer (?) or yoke (?) on the back, or with a register roll. 1913, the double axe, is also on a crystal bowl of the Ist dynasty. 1967 may help to read the lion group above, "protector of the . . . children." The black vase, 1968, was a sacred vase, apparently, of which the controller is repeatedly named. 1920 seems like a granary for storing ears, *see* 564–5. 1940 is probably a variant for the inspector, *see* 1568–74. 1942 suggests a maker of baskets or mats for offerings.

In most cases it is only by comparison of various titles which include one particular element, that we can gradually delimit the meaning of the different offices and services. The present list is only a beginning, which may serve as a stock of comparisons to be gradually amended and made more precise by adding new examples of titles. Such a list—however imperfect—is essential for a working basis, and I much hope that corrections and additions will be sent in, which may from time to time be published, to define further the many employments of Egyptian life.

FLINDERS PETRIE.

A FRAGMENT OF A CROWN OF OSIRIS FROM THE SOUTH OF RUSSIA.

Among other objects found in the Sloboda Nedvigovka (ancient Tanais), near the mouth of the Don, there is a fragment of bronze. The exact place and circumstances of the finding of that object are not known. In the catalogue of the Russian Historical Museum of 1893 this fragment is wrongly described as " a massive bronze ornament of a Scythian type in the shape of a banner, covered with a geometrical pattern. The top of the object is ornamented with a vitreous paste—yellow, red and green in colour." But in fact, the described object is a bronze flat piece (5 inches high, 3 inches wide, $\frac{1}{8}$ inch thick) broken at the top; on its left side we see two tenons; on the right a uraeus facing, with a solar disc on its head; the front of the body of the uraeus is ornamented with enamel inlaid in six cavities. The two upper cavities are filled with yellowish-green enamel; the remnants of brick-red enamel are in the two middle cavities; the enamel in the two lower cavities is lacking. The tail of the uraeus is interlaced with the horn of a ram. On its left side the tail is broken. Beneath the object we find an eye (for a hook?). The back of the flat piece is not ornamented. The front side is covered with an engraved design having the appearance of feathery lines. We may suppose that our fragment is the part of a feather crown and was to be put on a figure of Osiris. Similar crowns are in the *Catalogue Générale du Musée du Caire*, Vol. I, Pls. XVI, XVIII; Champollion, *Monuments*, etc., T. II, Pl. CXXXIX *bis*, 3.

At any rate the fragment awakens great interest, as it is unique coming from the South of Russia.

Thanks are due to the Administration of the Russian Historical Museum at Moscow for the kind permission to publish this object, and also to Prof. W. W. Struve of Leningrad.

Prof. A. Zakharov.

NOUVEAUX FRAGMENTS DE LA STÈLE DE PIANKHI.

J'AVAIS à peine complété ma traduction du texte de la stèle célèbre de Piankhi, roi d'Éthiopie et d'Égypte (XXIV dyn.), et mis en parallèle ce texte avec différentes copies faits de ce texte par Mariette, de Rougé, Schaefer, et la critique du texte de ce dernier par Anderson, quand j'ai reçu 5 fragments de cette même stèle trouvés par le Prof. Reisner à Gebel Barkal, au même emplacement où fut trouvée la stèle en 1862.

Cette opportunité m'inspira l'idée d'entreprendre la mise en place de ces fragments sur le grand bloc de la stèle, et j'ose espérer avoir réussi dans mon entreprise. Maintenant j'ai remis les fragments à leurs places sur la stèle.

Dans mon travail je me suis basé (1) sur la forme des fragments et (2) sur le sens de leurs textes. Ayant eu, dès le début, des doutes sur les rapports du 5ième fragment (No. 45085) avec la stèle, j'ai dû pour ce dernier fragment recourir à l'examen de la matière de la pierre.

A.—*Le Fragment No.* 47086.

D'après la forme :

D'après l'inclinaison de la ligne verticale AB bornant les inscriptions j'ai tiré la conclusion que ce fragment doit être placé entre les lignes 80 et 87 du revers de la stèle.

D'après le sens :

Par le sens j'ai pu préciser sa position sur les lignes 82, 83, 84 et 85 la correspondance du sens de leurs textes avec celui des lignes correspondantes de la stèle étant parfaite.

Les lignes 82–85 ayant été placées à leurs places, l'autre surface (courbée) inscrite du fragment se posera nécessairement sur les lignes 41, 42, 43, 44 et 45 du côté gauche de la stèle.

Fin de 81	*reçurent*	82	*ils*
„ 82	*Entra Sa Majesté dans l'intérieur*		
	de cette ville il	83	*offrit une offrande.*
„ 83	*Ils se posèrent sur leur ventres*	84	*devant*
„ 84	*magasins pour le domaine sacré*	85	*de son père Amen Ra.*

Le complément de la stèle par les lignes 41–45 du fragment est visible sur le tableau E qui suit.

B.—*Le Fragment No.* 47087.

D'après la forme :

La surface inscrite de ce fragment étant courbée, il ne peut être placé que sur le côté gauche de la stèle et entre les lignes 35–50.

D'après le sens :

Par le sens j'ai pu préciser la position de ce fragment sur les lignes 41, 42, 43, le texte de chaque ligne du fragment étant complété par le texte de la ligne correspondante de la stèle.

Le texte de ces lignes est la suite de la prière de la reine Nestentmehnut aux épouses et aux soeurs du roi Piankhi (v. la ligne 34) afin qu'il fasse grâce au Roi Nemarod. Par le texte du fragment et de la stèle, on voit que les épouses et les soeurs royales se prosternent devant le roi Piankhi (ligne 42), et que les épouses royales implorent la grâce du Nemarod, roi Het-Urt (ligne 43). Le fragment No. 47087 posé à la place que je propose, s'adapte exactement sur la cavité correspondante de la stèle.

C.—*Le Fragment No.* 47088.

D'après la forme :

D'après la forme du fragment j'ai tiré la conclusion qu'il doit appartenir au revers de la stèle étant donné que la mesure de l'angle formé par les deux surfaces inscrites mesure 100° et que les angles formés par le devant de la stèle et les surfaces laterales ne dépassent nulle part les 92°.

Pour préciser la position de ce fragment sur le revers de la stèle j'ai mesuré la grandeur des angles sur toute la hauteur de la stèle. Auprès des lignes 85 ⋁ 45 l'ouverture de l'angle est de 101°, auprès des lignes 91 ⋁ 50 elle est de 97°, et auprès des lignes 98 ⋁ 51 elle est de 92°. Il est donc clair que notre fragment ne peut être placé qu'auprès des lignes 85 ⋁ 45 et 91 ⋁ 50.

En étudiant la largeur de la bande formée par l'arrête de l'angle et la ligne verticale, bornant les inscriptions, j'ai tiré la conclusion qu'il faut placer le fragment No. 47088 auprès de la ligne 87 parceque sa largeur sur la stèle auprès de cette ligne est de 19 mm. et sur le fragment de 20 mm., tandis qu'auprès de la ligne 98 elle est de 27 mm.

La ligne 87 ayant été placée à sa place, l'autre surface inscrite du fragment se posera nécessairement sur les lignes 46 et 47.

D.—*Le Fragment No.* 47089.

Fin de 8	*ils assiègent contre elle,*	9	*qu'ils prennent ses hommes.*
,, 9	*N'entrez pas pendant*	10	*la nuit.*

D'après le sens :

La traduction du texte du fragment et de la stèle donnée ici-haut prouve que le sens du texte du fragment complète celui de la stèle.

D'après la forme :

Ce fragment entre de lui-même dans sa position exacte 49, 50, 51—8, 9, 10 sa forme correspondant exactement à la cavité de sa place sur la stèle. En outre la partie d'une lettre hiéroglyphique manquant sur le fragment à la ligne 51 se complète sur la stèle à la ligne 51 après la mise en place du fragment.

Le tableau E ci-bas représente les quatre fragments disposés à leurs places respectives sur le côté gauche de la stèle.

Cette disposition nous donne clairement le sens du texte de la grande cavité entre les lignes 35–51.

Par les lignes 35–40 la reine Nestentmehnut achève son discours et les épouses et les soeurs royales commencent à implorer le roi Piankhi afin qu'il fasse grâce au roi Nemarod, souverain de Het-Urt, en se mettant sur leurs ventres devant lui (ligne 42).

Dans la suite vient Nemarod (ligne 43), il s'approche du trône de Sa Majesté (ligne 50) et commence son discours (ligne 51).

F.—*Le Fragment No.* 47085.

Le texte du fragment No. 47085 contenant un cartouche du roi Piankhi (sur la ligne 2 du fragment) et la date d'un événement (sur la ligne 3 du fragment) nous inspire un intérêt particulier.

D'après la forme du fragment :

Le fragment No. 47085 a la surface inscrite plate, il pourrait donc être placé quelque part sur le revers de la stèle, entre les lignes 78–96 ou sur le côté gauche, entre les lignes 43–51, où la surface est plate. Sur le côté gauche il n'y a pas suffisamment de place, le fragment étant plus grand que la cavité existente.

Examinons maintenant ou on pourrait placer le fragment sur le revers de la stèle. En le plaçant successivement sur toutes les lignes du revers de la stèle où il y a des cavités, nous voyons que le fragment avec son coin pointu sort partout des limites de la ligne bornant le texte de la stèle de 1,5 cm. minimum. La largeur des deux bandes inscrites du fragment ensemble est de 6,8 cm., tandis que la largeur pareille sur le revers de la stèle n'a nulle part moins de 7,5 cm.

D'après le sens :

La ligne 1 du fragment No. 47085 parle de l'offrande au dieu Ammon.

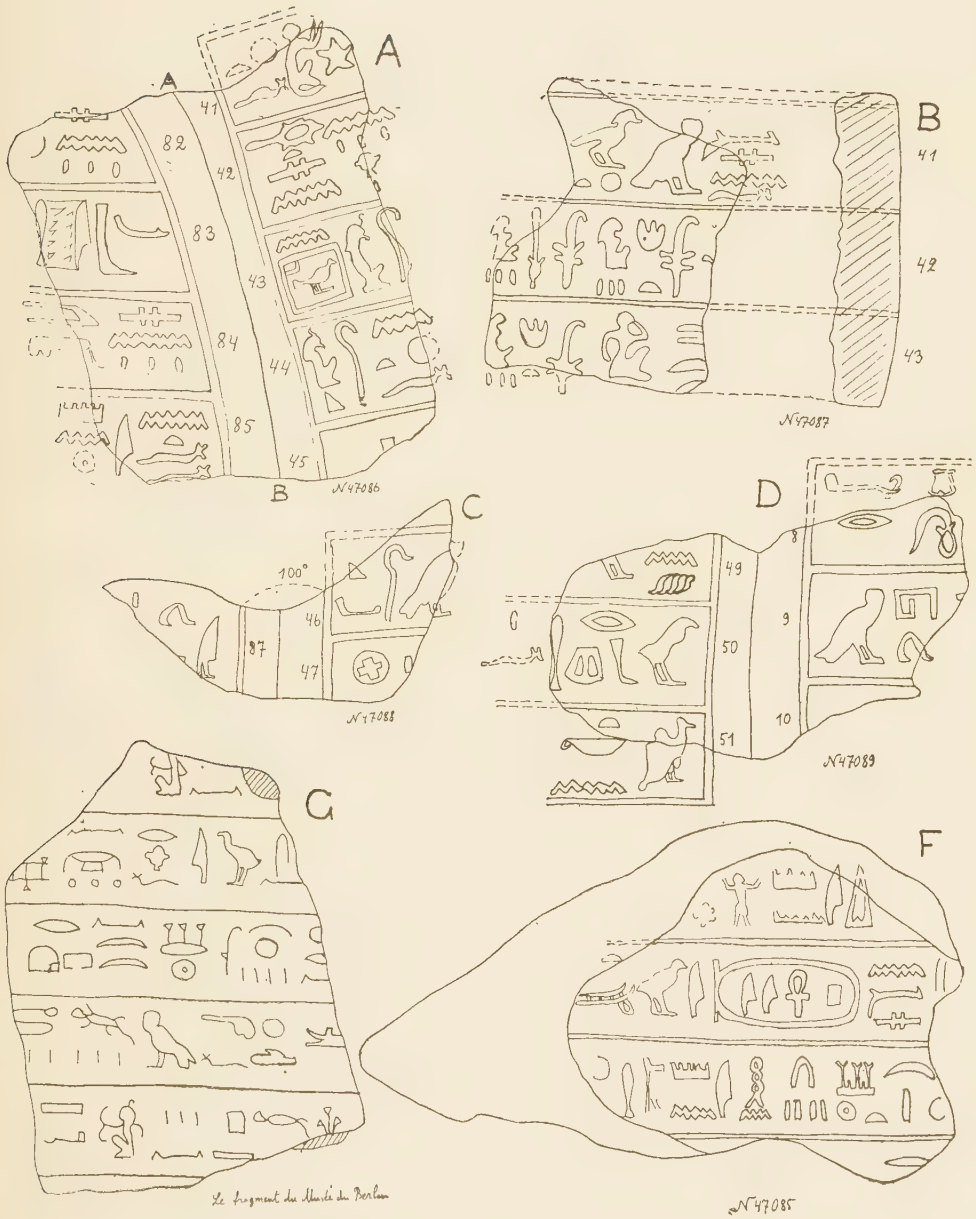
La ligne 2 parle de quelquechose qui appartient à Piankhi, existant d'Atoum.

La ligne 3 parle d'un certain événement au mois 1er de Shemouit le jour 4, en présence du grand prêtre d'Ammon.

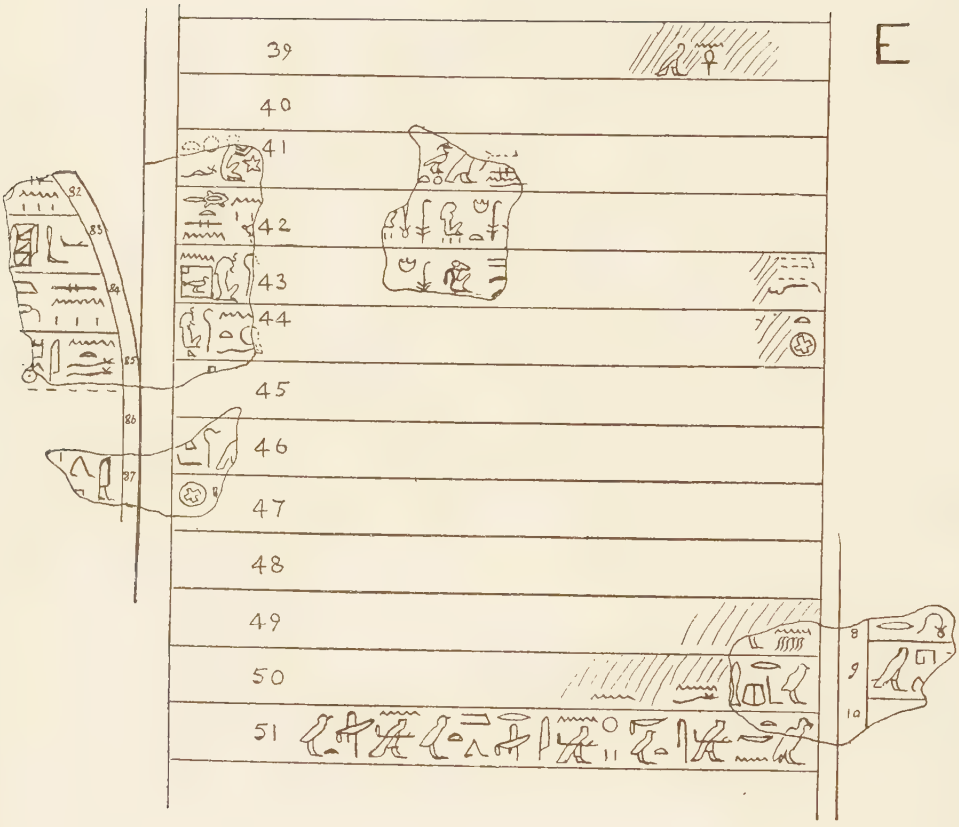
Ces textes ne correspondent nullement au texte contenu sur le revers de la stèle auprès des cavités existentes.

Ayant finalement examiné la composition du granit gris de la stèle et celle du fragment No. 47085, nous avons trouvé que les petites taches de quartz et mica du fragment ont le coloris rose, tandis que celles de la stèle sont de couleur de cannelle claire et foncée.

Par les considérations ci-haut je conclus que le fragment No. 47085 appartient à une autre stèle peut-être non encore découverte et appartenant toujours au roi Piankhi puisque son cartouche s'y trouve.


A
A
41
82
42
83
43
84
44
85
45
B
N47086
B
41
42
43
N47087
C
100°
46
87
47
N47088
D
8
49
9
50
10
51
N47089
G
Le fragment du Musée de Berlin
F
N47085

To face p. 88.]


E
39
40
41
42
43
44
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46
47
48
49
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87
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9
10

La forme de l'écriture et la largeur des lignes du fragment No. 47085 sont presque identiques à celles du fragment du Musée de Berlin, que Lepsius a trouvé à Gebel Barkal pendant son voyage en Nubie, estampage duquel j'ai reçu du Prof. Schaefer de Berlin. Cette coincidence me fait penser qu'il devait exister une autre stèle Piankhi, peut-être symmetrique à celle que nous possedons déjà. Je serais très heureux si mon hypothèse pourrait servir de stimulus à la découverte d'une page inconnue des archives de l'Ancienne Égypte.

L'été de 1924 j'ai visité M. le Prof. Reisner, qui après avoir connu mon travail m'a dit que ses conclusions coincident exactement avec les miennes. Prof. Reisner a aussi ajouté que pendant son dernier voyage à Gebel Barkal en Nubie, il avait trouvé encore quelques petits fragments du texte hiéroglyphique en basalte noir.

Gr. Loukianoff.

REVIEWS.

Le Nil et la civilisation Égyptienne. By A. MORET. 8vo. 573 pp., 12 pls., 77 figs. 1926. (*La Renaissance du Livre.*) 25 frs.

The series of the "Evolution of Humanity" continues, and is issued in French at less than a quarter of the price charged for the English edition. This volume is of far sounder work than the others which we have noted before. The treatment throughout is consistent, and includes many translations of important texts, so that the Egyptian mind speaks for itself. Naturally the author has mainly dwelt on the religion and social conditions, while the physical abilities and knowledge do not occupy a tenth of the space. This gives a view out of proportion to the actual life, and still more so to the remains that are so striking. It only represents one side of the title of "Egyptian civilisation," and has nothing about the physiography of the Nile which heads the title.

The difference of feeling between the Old and Middle Kingdoms is well brought forward; but the rise of Osiris to importance is part of the Herakleopolitan rejection of the dominance of Ra, more racial than democratic. A few points may be reconsidered. Page 6, the corruption of the Greek lists of kings, is much the same as that of the various lists of the Ptolemies; it is general to late Greek writers, and not special to the early history. Page 134, on the slate it is the tribes, rather than the king, shewn as taking the fortresses. Page 403, the Greeks were in Naukratis more than a century before Amasis, and the trader preceded the soldier in Egypt. Page 404 assumes a great increase of private documents under the Bubastites, but the Kahun papyri shew that private wills and settlements were in full use in the Middle Kingdom. Page 510, the bracelet is of solid forms, and not open outlines like the *sa* sign. Page 843, note the abundance of Mousterian and mesolithic flint-work in Egypt. This book is altogether a valuable account for general reading, within the scope which it covers.

L'Art de la Navigation en Égypte jusqu'à la fin de l'ancien empire. By CHARLES BOREUX. 4to. 328 pp., 2 pls. 1925. (Cairo, Institut Français d'Archéologie orientale.) 225 P.T.

This volume completes the work already noticed in this Journal (1925, p. 91), down to the end of the Old Kingdom. It deals with all the questions of shipping with great fullness of detail, and is abundantly illustrated with nearly two hundred figures in the text; a useful feature is the repetition of blocks as often as there is reference to them, so as to avoid looking back. A complete corpus of information is here provided, with discussion of previous works where there are different views to be considered, and this will long be the definitive work of reference on the subject.

Throughout there are many valuable remarks and considerations of details. The absence of ribs to vessels, and building entirely by edge-dowelling of timbers, is supposed only to belong to the lesser vessels, and on the Dahshur boats or those seen by Herodotos. Ribs seem to be essential for large ships, and two words are supposed by their determinatives, and their number in a ship, to be the needful ribs. These are *ugătu* and *mes-sert*; may we suggest that these refer to comparing the pair of ribs across a boat to a "jaw," or regarding ribs as "forming the wall" of the side? The earlier vessels are propelled by rounded fiddle-shaped paddles, which were succeeded in the Vth dynasty by long pointed oars. The single mast of the prehistoric boat was followed by the forked mast resting each leg of it on the side of the boat, and the single mast returned to use at the close of the Vth dynasty. The purpose of the forked mast may perhaps have been to distribute the weight on the edges, and prevent the strain on the floor of the boat, as there was but a slight keel, if any. The difficulty about the stability of vessels with so little hold on the water is considered to have been avoided by having a very wide beam, even equal to half the length. This was not objectionable in Egypt, as a ship travelled by floating down the stream half the time and then benefited by friction. The use of weather-boards above the gunwale proper, to keep out waves, is pointed out in representations of lashing below the edge; these boards are general on cargo boats on the Nile now, plastered up with mud. Such are some of the many points of interest here.

A matter which might be amplified is the nature of the steering oar. It seems to be here accepted, as usual, that it moved like a rudder. It has, however, a cross-arm projecting from it, and in models it is shown as resting on the stern and on the top of a high post, thus fixing its axis in position. The cross-arm can, then, only have been used to rotate it on its axis. The same form of steering is seen now in the boats on Lake Como; the big steering oar there rotates in fixed supports, and is moved by two ropes turned in opposite directions around it. This explains why in Egyptian figures there is sometimes rope in place of a cross-arm.

Another subject to be cleared up is the presence of a stout twisted cordage from end to end of a vessel, raised by supports in the middle. The explanation of Erman is accepted for this in smaller vessels, that it was twisted to draw up the ends of the vessel and give it a curve. This is quite impossible, as any bending of a wooden vessel, or even of a papyrus boat, would force every joint open. The only sense of it must be the same as in the large ships, to prevent the vessel breaking its back, especially in regard to the long projection of the ends above the water-line. Why should it, then, be represented as being twisted during the boat-building? Doubtless formerly, as now, boats were supported all along by props during building and, when floated mainly on the middle, the strains would be different. Thus to save this change the long tie was put in and strained until it just took up the weight of the ends off the props; then the boat could be floated off by the high Nile safely and caulked where needed.

On p. 504 the difference is not observed between a ruling conquest which does not alter the civilisation and a tribal conquest which changes the people. The Persian conquest of the XXVIIth dynasty was ruling, but did not alter the customs or products. So the Amorite conquest of the VIIth–VIIIth dynasties ruled, but did not bring in a dominant civilisation. The seal of King Khondy is conclusive as to his being a Syrian. The work has abundant indices of words, hieroglyphs, references to figures, and to other works. Its complete apparatus is worthy of such a permanent treatise, which is to be heartily welcomed.

L'Art Égyptien. By CHARLES BOREUX. Sq. 8vo. 68 pp., 64 pls. 1926. (Van Oest, Paris and Bruxelles.) 30 frs.

After the excellent study of Egyptian ships by M. Boreux, we might hope for fresh research when he deals with the art; but he is content in this book to write for the public, which does not yet know the familiar masterpieces here figured and compared. No doubt it is the demands of a publisher for a popular series which has thus limited his scope. The account of the various branches of art is pleasant and correct, with far more artistic insight than Maspero had, but without much fresh analysis. The best part is the half-dozen pages given to Amarniote work. That the true Egyptian line of growth ended with the XIIth dynasty, and that the XVIIIth dynasty was a product of foreign influences, is well perceived; "the close relations which the Egyptians continually held with the other peoples of the Mediterranean—Hittites, Cretans and Mykenaeans—while it considerably widened their view, had also awaked in them the complex feelings which one always sees grow in an age of refined culture, the most usual being a wide curiosity, with a lively taste for what we now call psychological analysis." He adds that the art of Amarna was introspective, very different from the realism of the Old Kingdom, and sought to represent the mental aspect. All this is an advance on what has generally been said on this period by its admirers or detractors. It makes us wish that the author would take an opportunity of writing fully on all the periods, and deal with many important things which do not appear here—the prehistoric art, the great novelty of the work of Zeser, the Lahun pectorals, the Petosiris sculptures.

From another point of view it is regrettable that only two plates appear here which are not too familiar. This is another publisher's album, of which we have had five already, and are promised yet a seventh, all repeating stock subjects. Too much must not be expected of the quality of 64 plates for 3*s.* 6*d.*, but the process gives a woolly surface running into black and white, without as much detail as a good net block.

La Croix ansée des anciens Égyptiens. PIERRE MONTET. (*Revue Archéologique*, 1925.)

Montet considers the true nature of the ☥, the sign of life, to be an ornament in the form of a necktie tied in a bow, which may be worn as necktie, sash or diadem. The upper loop represents the part that goes round the neck, waist or head, the side pieces are the two loops, and the lower part represents the loose ends. Round the necks of three ivory lionesses (playing-pieces for the game of *mhn*)—found by him in 1913 in an unpublished tomb near Abu Roash, of the time of King Den—were collars tied in front in a bow with two side loops and two loose ends. Montet derives the counterpoise of later necklaces from this Ist dynasty necktie, the ends being joined at the base to allow for a decorative filling. The name of the counterpoise is, of course, *mʿnḫ.t*, which may be spelt with the ☥ sign. In the Louvre mastaba the word occurs without the initial *m*. The name of the necktie-like ornament must, he concludes, have been *ʿnḫ*, from which were formed *ʿnḫ.t* and *mʿnḫ.t*, the names for the ornament derived from the primitive ☥.

L. B. E.

Alter und Herkunft der ägyptischen "Löwenjagd-Palette." HERMANN RANKE. (*Sitzungsberichte der Heidelberger Akademie der Wissenschaften, phil.-hist. Klasse,* 1924–25. 5 Abhandlung.)

The writer considers the lion-hunt palette to be a product of Lower Egypt, dating to a period before the union under Menes. This theory would explain the discrepancy between the general design, and the lack of differentiation of the principal figures on the one hand and the presence of the two hieroglyphic signs on the other, and would also account for the dress and appearance of the hunters and for the double axe. According to Ranke, the scene represents and commemorates a great and united sally against wild beasts on the part of warriors from the western and eastern realms, who are shown bearing their respective standards.

L. B. E.

Excavations at Carthage, 1925. By FRANCIS W. KELSEY. 8vo. 51 pp., 6 pls., 24 figs. 1926. (Macmillan.)

This is called a preliminary report, but gives an excellent general view of the whole work, with valuable details of antiquities and inscriptions. In the cemetery the three layers of Punic remains are distinguished; at the bottom are vases, surrounded by stone cairns, and partly sunk into the rock, containing charred bones of children, reckoned to date from the founding of Carthage; above that, a later level of vase deposits, without cairns, placed in groups with a dedicatory stone over each group. Lastly, these were earthed over about the end of the IVth century B.C., and the latest layer of vases was deposited. The inscriptions are dedications to the goddess Tanit and to Baal-Hammon. It is suggested that this goddess is the Libyan Neit, with the feminine prefix T, like the Egyptian article *ta.* The regular emblem of the goddess is like the *onkh* sign with the stem widened out below. This form is found on several steles of the Ist dynasty (*Royal Tombs,* I, xxxi, pp. 11, 12, 38; II, xxvi, p. 52). It is not due to a corruption of the *onkh,* but is the primitive form which continued in use in Libya. The site of Carthage has been shamefully neglected by the French authorities; the site is all cut up in building lots, much now built over during recent years; the cemetery and steles, found accidentally, were left to be ruined. At last, American archaeologists stepped in, and with a staff of ten Americans and four French the salving of the site has been systematically undertaken, while part can still be examined. Prof. Kelsey is to be congratulated on his valuable work, which will do much to materialise the history of Carthage.

A Waxed Tablet of the Year 128 A.D. By Professor F. W. KELSEY. 9 pp., 4 pls. (*Trans. American Philological Association,* 1923.)

This paper describes a complete official copy of the birth register of a girl, Herennia Gemella. It is entirely in Latin, written on wax on the interior of a pair of wooden tablets; a complete duplicate is written on the bare wood outside. Thus it could be easily consulted, with the reserve of the wax copy inside in case of damage.

The Rise of the Imams of Sanaa. By A. S. TRITTON. 8vo. 141 pp. 1925. (Milford). 7*s.* 6*d.*

This is not Egyptian, and scarcely ancient history, so we can only refer to it here. It deals with a rising against the Turkish government in the region north of Aden in A.D. 1597 till 1628. A chapter at the end deals with the incidents concerning religious and social life.

Psalterii Versio Memphitica. Réédition par O. H. E. Burmester et Eugène Dévaud, pp. ix-180. (Istas, Louvain.)

This is the first volume of a series of re-editions of Bohairic texts of the Old Testament, which are now practically inaccessible owing to their being out of print. The editors propose that each text shall be exactly copied from the oldest known manuscripts, even with the original errors (these, however, will be noted, as also any peculiarities of writing), with the double division into chapters and verses, and also into folios, pages and lines. Each volume will also contain all the variants from all known manuscripts as far as possible. It is a colossal task, but the names of the editors are a guarantee that the work will be done with the utmost care and accuracy. Therefore to all students of Coptic and to all students of the Bible, this volume and those which follow will be absolutely indispensable. A critical edition of a series of texts will inevitably give a great impulse to scholarship, and the editors will earn the gratitude of the present and all future generations of scholars.

M. A. M.

The Phonetics of Arabic. By W. H. T. Gairdner. Sm. 8vo. 107 pp. (Oxford University Press.) 7*s.*

Canon Gairdner has broken entirely new ground in this little book on the phonetics of Arabic, and by his knowledge of the language, both classical and colloquial, he has produced an extremely valuable help to all Europeans visiting or living in Egypt. In all spoken languages the learner must have oral teaching, but though the teacher knows how a word should sound when rightly pronounced, he has very often no idea how the sound is produced; the learner is usually equally ignorant, with the result that he may learn to read but very seldom learns to pronounce correctly in speaking. Arabic is entirely different from European languages, but to an untrained ear there often appears no distinction between consonants which to the accustomed ear are vividly distinct. With this book to explain the methods by which Arabic sounds are produced and with a teacher to superintend the production of those sounds, a beginner will rapidly learn to pronounce correctly and to speak with the proper accent and intonation. Canon Gairdner is to be congratulated on a very useful and practical book.

M. A. M.

Orientalische Mysterienkulte im römischen Rheinlande. By H. Lehner. (*Bonner Jahrbücher,* Vol. 129, 1924, pp. 36-91.)

This is the best and most recent treatise on foreign cults in the Roman provinces Germania Superior, Germania Inferior, and Belgica. The author assembles and tabulates the available material and draws the following conclusions. A fairly wide spread of Oriental cults is revealed, not only in military circles such as frontier garrisons, but likewise far into the Celtic hinterland. Oriental religious ideas were common property in the Rhineland in the IInd and IIIrd centuries to a far greater extent than has been supposed hitherto. Tomb carving and offerings were strongly influenced by these mystery cults in middle and late Imperial times, and the change from cremation to inhumation, which took place in the middle of the IIIrd century, was probably due to them and not, as is generally supposed, to Christianity. The Army was responsible for the introduction and diffusion of Eastern ideas to a superficial and partial extent

only, as is evident from the difference in date between the occupation by Oriental auxiliaries and the civilian records. The former mostly belong to the Ist and IInd centuries, whilst the civilian records are, on the whole, later. For Isis, Serapis and the Great Mother, the Army as such cared little or nothing, and these cults in particular are fairly widespread. Military influence need only be taken into account in the case of Mithraism. Nor do the inscriptions reveal a strong civilian strain of merchants, craftsmen and slaves, and Syria, in particular, had the least influence in the hinterland, where this element was strongest. The firm hold on the civilian population of Oriental religious ideas must, therefore, have been due to the teaching and influence of the priesthoods, of whom there is some inscriptional record (as, for instance, the *tabella ansata* dedicated to Isis by a priest, which is published for the first time in this volume).

L. B. Ellis.

NOTES AND NEWS.

THE continuity of the civilisation of Egypt has now been completely traced in recent years, from the Badarian period onward. The British School in Egypt therefore, in the coming season, will proceed with the collateral search on the Egyptian remains in the South of Palestine—Egypt over the border. This is in accordance with the constitution of the School, which was founded to work in any country that has been subject to Egypt, and so to deal with all branches of the Egyptian civilisation. Such research has been cordially accepted by the authorities and the other representatives of British excavation in Palestine. The Director will be accompanied by Lady Petrie, with Mr. and Mrs. Starkey, and two fresh students—Mr. Risdon and Mr. Harding. Dr. Parker of Cambridge will take part in the work, and Miss Murray may join later. In the spring the Japanese archaeologists, Professor Hamada and Mr. Umehara, are expected to arrive. The outcome of searching a district of such historic importance cannot be seen in advance; but among the possible openings are the Badarian settlements, the Hyksos occupation, the temple of the Syrian goddess, and the many movements of invaders who have crossed the ground from either side.

Mr. Quibell, now retired from the Cairo Museum, is going out to carry on the government excavations at the Step Pyramid of Saqqarah.

Mr. Frankfort will continue the work of the Egypt Exploration Society at Amarna and Abydos.

Mr. Mackay has been engaged by the Archaeological Survey of India to work on the earliest civilisation found in that land, in the Indus Valley. It is very desirable that an excavator familiar with the buildings and objects of Sumerian age should interpret the Indian remains, which are of similar character.

It will be remembered how the work of the British School in 1924 at Qau led to a series of connections of the IXth to XIIth dynasty. The tombs like Nubian temples were made by the IXth-dynasty princes Uahka; the son of the great Uahka was Senusert; the Senuserts of the XIIth dynasty were like the black granite sphinxes; these were also like the modern Gallas. Now the chain is linked up by the heathen Gallas having their high God named Wák'a. The family name of Uahka is thus the Egyptian accommodation of the theophoric name of the Galla princes of the IXth dynasty. Wák'a is the word for "sky" or "sun," and so used for the heavenly god. This is described in an article by Maria v. Tilling of Hamburg in *Orient. Lit. Zeitung*, October, 1926; in the same article is named the great goddess 'Ateté, which suggests an earlier Galla connection with the name Ateta, familiar in the Old Kingdom.

The catalogue of *Glass Stamps and Weights* is now ready, and copies can be ordered from the Secretary of the British School, University College, W.C. 1.